

09/2022/15

PCT/US97/09845

PATENT COOPERATION TREATY

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NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark
Office
(Box PCT)
Crystal Plaza 2
Washington, DC 20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 04 March 1998 (04.03.98)	
International application No. PCT/US97/09845	Applicant's or agent's file reference 021506.0113
International filing date (day/month/year) 10 June 1997 (10.06.97)	Priority date (day/month/year) 10 June 1996 (10.06.96)
Applicant VAYDA, Mark et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
07 January 1998 (07.01.98)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Ingrid Hours

09/202-45

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 021506.0113	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US97/09845	International filing date (day/month/year) 10 JUNE 1997	Priority date (day/month/year) 10 JUNE 1996
International Patent Classification (IPC) or national classification and IPC IPC(6): G09G 5/00 and US Cl.: 345/161, 168, 167; 400/489; 463/37, 38		
Applicant VAYDA, MARK		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets.
- ☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 2 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 07 JANUARY 1998	Date of completion of this report 19 NOVEMBER 1998
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer LUN-YI LAO <i>Diane Smith</i> Telephone No. (703) 305-4873

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US97/09845

I. Basis of the report

1. This report has been drawn on the basis of *(Substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments)*:

- ☐ the international application as originally filed.
- ☒ the description, pages (See Attached) , as originally filed.
pages _____ , filed with the demand.
pages _____ , filed with the letter of _____.
pages _____ , filed with the letter of _____.
- ☒ the claims, Nos. (See Attached) , as originally filed.
Nos. _____ , as amended under Article 19.
Nos. _____ , filed with the demand.
Nos. _____ , filed with the letter of _____.
Nos. _____ , filed with the letter of _____.
- ☒ the drawings, sheets/fig (See Attached) , as originally filed.
sheets/fig _____ , filed with the demand.
sheets/fig _____ , filed with the letter of _____.
sheets/fig _____ , filed with the letter of _____.

2. The amendments have resulted in the cancellation of:

- ☒ the description, pages NONE.
- ☒ the claims, Nos. NONE.
- ☒ the drawings, sheets/fig NONE.

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box Additional observations below (Rule 70.2(c)).

4. Additional observations, if necessary:

NONE

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. STATEMENT**

Novelty (N)	Claims <u>1-52</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-52</u>	NO
Industrial Applicability (IA)	Claims <u>1-52</u>	YES
	Claims <u>NONE</u>	NO

2. CITATIONS AND EXPLANATIONS

I. Claims 1-2, 6, 9-11, 13, 16, 22, 23, 25, 33, 34 and 38-52 lack an inventive step under PCT Article 33(3) as being obvious over Reeves in view of Learn(4,458,238).

As to claims 1, 10 and 25, Reeves teaches an input device(20) comprising a base portion(28) a control portion(22); a plurality input means(30, 32); a universal connection means(24) for connecting the control portion(22) to the base portion(28) and signal generating means(microprocessor) for generating a first plurality of signals indicating a position of the control portion(20) and generating a second plurality of signals indicating a position of the control portion(20) and generating a second plurality signals indicating user data input requests(30, 32)(see figure 1, column 1, lines 49-56 and column 4, lines 3-35).

As to claims 1, 10 and 25, Reeves fails to disclose at least three input means located in the same plane.

Learn teaches an input device(11) having five input means(12a-12e) mounted in the same plane(see figure 1). It would have been obvious to have modified Reeves with the teaching of Learn, since these input means could be actuated by user's fingers individually and the location of the input means would not effect the function of the input means.

As to claims 2 and 11, Reeves teaches an input device(20) comprising five keys(30, 32)(see figure 1).

As to claim 6, Reeves teaches an input device(20) comprising a gimbal mechanism(36, 96)(see figures 2-4; column 4, lines 36-47 and column 6, lines 35-54).

As to claims 9, 22-23 and 33-34, Reeves teaches an input device(20) comprising a rotational mechanism(see figures 1, 2; abstract and column 4, lines 17-28).

As to claim 13, Reeves teaches a computer system comprising (Continued on Supplemental Sheet.)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

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VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Claim 30 is objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof: since these are two claims number as 30.

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

I. BASIS OF REPORT:

This report has been drawn on the basis of the description,
pages, 1-28, as originally filed.
pages, NONE, filed with the demand.
and additional amendments:
NONE

This report has been drawn on the basis of the claims,
numbers, NONE, as originally filed.
numbers, NONE, as amended under Article 19.
numbers, NONE, filed with the demand.
and additional amendments:
Claims 1-52, filed with the letter of 12 January 1999.

This report has been drawn on the basis of the drawings,
sheets, 1-22, as originally filed.
sheets, NONE, filed with the demand.
and additional amendments:
NONE

V. 2. REASONED STATEMENTS - CITATIONS AND EXPLANATIONS (Continued):

two input devices(20, 16)(see figure 1 and column 4, lines 3-16).

As to claim 16, Reeves teaches a computer system comprising universal connection means(24) for a user to move the control portion(22) in a first discrete positions in a first direction(X direction) and a plurality of second discrete position in a second direction(Y direction(see figure 1 and column 4, lines 3-35).

As to claims 38-52, Reeves teach a key(32) is a multi-position switch(see figure 1 and column 4, lines 17-33).

II. Claims 3-5, 7, 8, 12 and 36 lack an inventive step under PCT Article 33(3) as being obvious over Reeves in view of Learn and Arita et al(5,432,530).

Reeves as modified fails to disclose a slider and a track ball.

As to claims 3, 5, 7, 8, 12 and 36, Arita et al teaches an input device comprising a slider(1); a track ball(31)(see figure 12A, 12B and column 9, lines 25-30) and a palm portion disposed parallel to a base portion(see figures 4A, 12B, 15A, 15C; abstract; column 1, lines 14-22; column 7, lines 20-35 and column 10, lines 9-24). It would have been obvious to have modified Reeves with the teaching of Arita et al, since Reeves and Arita et al both are input devices which could moving a cursor on a display to any position and Reeves modified by Arita et al could have a small size of input device, low in power consumption and able to be mounted on a portable computer(see column 2, lines 50-53).

As to claim 4, Reeves teaches an input device is a joy stick(20)(see figure 1).

III. Claims 14-15, 17-19 and 26-30 lack an inventive step under PCT Article 33(3) as being obvious over Reeves in view of Learn and Kuroda et al(5,302,969).

Reeves as modified fails to point out a display for presenting a menu for selecting characters and graphic icons. Kuroda et al teach a computer system comprising a display(104) for presenting characters and graphic icons and corresponding keys(B) for selecting the characters and graphics icons(see figures 1, 9; column 4, lines 67-68 and column 5, lines 1-40). It would have been obvious to have modified Reeves as modified with the teaching of Kuroda et al. so as to eliminate a user's hesitation to select the characters and graphic icons and therefore a user could simply proceed with the next operation(see column 5, lines 19-22).

As to claims 18-19 and 29-30, Reeves fails to disclose each row-vertical cluster pair having character which less than five.

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 11

Learn teaches a computer system comprising a display(10) having a plurality rows and vertical clusters(see figure 1). Each row-vertical cluster pair has four character selection icons(see figure 1 and column 3, lines 21-68). It would have been obvious to have modified Reeves with the teaching of Learn, as to provide a system for entering character or other text into a computer using an input device having a small number of keys.

IV. Claims 20-21 and 31-32 lack an inventive step under PCT Article 33(3) as being obvious over the prior art as applied in the immediately preceding paragraph and further in view of Holtey et al(4,724,431).

Reeves fails to differentially highlight character icons. Holtey et al teach a display system for highlighting character or graphics in different colors(see column 1, lines 11-24). It would have been obvious to have modified Reeves as modified by Holtey et al, so as to distinguish characters next to each other.

V. Claim 24 lacks an inventive step under PCT Article 33(3) as being obvious over Reeves in view of Learn and Ishiwata et al(4,870,389).

Reeves as modified fail to point out a character selection means. Ishiwata et al teach a computer system comprising a display(60) for presenting characters and a character selection means for altering the characters in response to rotational positions signal generated by actuating an input device(11)(see figures 1, 2; column 2, lines 34-44 and column 6, lines 22-25). It would have been obvious to have modified Reeves with the teaching of Ishiwata et al, since Reeves and Ishiwata et al both have had input device and so characters on a display could be selected by a user.

VI. Claim 35 lacks an inventive step under PCT Article 33(3) as being obvious over Reeves in view of Learn, Kuroda and Ishiwata et al(4,870,389).

See the discussion of Reeves, Learn, Kuroda and Ishiwata et al and the reason for combining Kuroda and Ishiwata et al above.

VII. Claim 37 lacks an inventive step under PCT Article 33(3) as being obvious over Reeves in view of Learn and Bouton(5,396,267).

Reeves as modified fail to disclose user's hand is parallel to the control portion.

Bouton teaches an input device(86) having a control portion(32) and a user's hand will be parallel to the control portion(32)(see figures 1, 4). It would have been obvious to have modified Reeves as modified, so a user's hand could rest on the input device and would not easy to get tired.

NEW CITATIONS

US 5,396,267 A (BOUTON) 07 MARCH 1995, SEE FIGURES 1 and 4.

US 4,724,431 A (HOLTEY et al.) (09 FEBRUARY 1988), see column 1, lines 11-24.